



Replacement Claims

RECEIVED
DEC 02 2002
TC 1700

Please replace the claims with the following:

1. A substrate body-floating apparatus for blowing an air flow onto a rear surface of a disk-shaped substrate body to float and rotate the substrate body comprising:

5 a floating unit having a surface with a plurality of fine floating pores for floating the substrate body, a plurality of fine centering pores for centering the substrate body at a center of a substrate body-floating apparatus, a plurality of fine rotational pores for rotating the substrate body at a center of said apparatus, and a plurality of auxiliary fine suppression pores for suppressing vibration of the substrate body when the
10 substrate body is rotated at a high speed, wherein all pore types of said fine floating pores, said fine centering pores, said fine rotational pores, and said auxiliary fine suppression pores are provided on a surface of said floating unit and are inclined
15 against the surface of said floating unit, an air flow being injected into said all pore types in a direction of the inclination.

3. The substrate body-floating apparatus according to claim 1 wherein said plurality of fine floating pores for floating the substrate body crosses a rotation axis of the substrate body, a surface of said floating unit being divided into four quadrants

5 by an angular spacing of 90 degrees, a plurality of said fine
floating pores for floating being provided in each quadrant, each
said fine floating pore within one said quadrant having a same
floating pore direction, said same floating pore direction being
parallel to a diagonal line of said one said quadrant, said
10 diagonal line being oriented to a center of said floating unit.

4. The substrate body-floating apparatus according to claim
1 wherein said plurality of fine centering pores for centering
are located one of at positions on an outer periphery of the
substrate body and on an outer side from the outer periphery at
5 an angular spacing relative to one another, said plurality of
fine centering pores for centering being directed toward a
center of said floating unit.

5. The substrate body-floating apparatus according to claim
1 wherein said plurality of fine rotational pores for rotating
are located at positions away from a tangential line to a circle
with a radius smaller than the radius of the substrate body
5 around a center of a surface of said floating unit, said adjacent
fine rotational pores for rotating being directed away from one
another in opposite tangential directions.

6. The substrate body-floating apparatus according to claim
1 where said plurality of auxiliary fine suppression pores are
directed toward a center of said floating unit and located on a
periphery of a circle from the position of said plurality of fine

5 rotational pores for rotating from a center of said floating unit, adjacent said auxiliary fine suppression pores having an angular spacing of 90 degrees therebetween.

7. A substrate body-floating type of heater comprising:

a floating means for applying air to a rear surface of a substrate body to float, rotate and suppress vibration to the substrate body, said floating means including a plurality of floatation pores, a plurality of rotational pore, and a plurality of vibration suppression pores therein, said floatation pores, said rotational pores, and said suppression pores being positioned and directed so as to promote floatation, rotation, and vibration suppression, respectively, via air flow control; and
10 an optical lamp for heating a surface of the substrate body.

8. A substrate body-floating type of film-forming apparatus comprising:

a floating means for applying gas to a rear surface of a substrate body to float, rotate and suppress vibration to the substrate body under atmospheric or under depressurized conditions for , said floating means including a plurality of floatation pores, a plurality of rotational pores, and a plurality of vibration suppression pores therein, said floatation pores, said rotational pores, and said suppression pores being
10 positioned and directed so as to promote floatation, rotation, and vibration suppression, respectively, via air flow control.